

# WEST Search History

DATE: Thursday, January 09, 2003

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
side by side			result set
<i>DB=USPT,PGPB; PLUR=YES; OP=ADJ</i>			
L6	l3 and L5	2	L6
L5	beta\$1blocker	772	L5
L4	pindolol	1009	L4
L3	l1 and L2	171	L3
L2	gastrointestinal	27583	L2
L1	((514/415)!.CCLS.)	872	L1

END OF SEARCH HISTORY

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Enter a Chemical Name, CAS Number, Molecular Formula or Weight.  
Use \* for partial names (e.g. ben\*).  
Search here for free. For professional searching, use [ChemINDEX](#).

Search

Pindolol [13523-86-9]

Synonyms: Barbloc; 2-Propanol, 1-(1H-indol-4-yloxy)-3-[(1-methylethyl)amino]-; Pindolol; Viskin;

	<b>Tools</b> <a href="#">BUY AT CHEMACX.COM</a> <a href="#">VIEW CHEMDRAW STRUCT</a> <a href="#">VIEW CHEM3D MODEL</a>	<b>OpenChem</b> <a href="#">VIEW LINKS</a> <a href="#">ADD COMPOUND</a> <a href="#">ADD/CHANGE PROPERTY</a> <a href="#">ADD LINK</a>
	<b>CAS RN Lookup</b> <a href="#">THE MERCK INDEX</a> <a href="#">NCI DATABASE</a>	

Formula	C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub>	Molecular Weight	248.3242
CAS RN	13523-86-9	Melting Point (°C)	
ACX Number	X1004427-8	Boiling Point (°C)	
Density		Vapor Density	
Refractive Index		Vapor Pressure	
Evaporation Rate		Water Solubility	
Flash Point (°C)		EPA Code	
DOT Number		RTECS	
Comments	Beta blocker, Vasodilator; 5-HT <sub>1A</sub> receptor antagonist		

More information about the chemical is available in these categories:

FILE 'HOME' ENTERED AT 19:05:05 ON 27 DEC 2001

=> FIL MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.15	0.15

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FILE 'USPATFULL' ENTERED AT 19:05:16 ON 27 DEC 2001  
CA INDEXING COPYRIGHT (C) 2001 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'PROMT' ENTERED AT 19:05:16 ON 27 DEC 2001  
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=> s 5ht1a antagonist or 5ht1a partial agonist  
L1 159 5HT1A ANTAGONIST OR 5HT1A PARTIAL AGONIST

=> s 5ht1a (s) antagonist or 5ht1a (s) partial agonist  
L2 435 5HT1A (S) ANTAGONIST OR 5HT1A (S) PARTIAL AGONIST

=> s ?pindolol  
LEFT TRUNCATION IGNORED FOR '?PINDOLOL' FOR FILE 'PROMT'  
L3 29438 ?PINDOLOL  
Left truncation is not valid in the specified search field in the  
specified file. The term has been searched without left truncation.  
Examples: '?TERPEN?' would be searched as 'TERPEN?' and '?FLAVONOID'  
would be searched as 'FLAVONOID.'

If you are searching in a field that uses implied proximity, and you  
used a truncation symbol after a punctuation mark, the system may  
interpret the truncation symbol as being at the beginning of a term.  
Implied proximity is used in search fields indexed as single words,  
for example, the Basic Index.

=> s gastrointestinal or gi or ulcer or duodenal or dyspepsia or irritable  
bowel syndrome or ibs

L4 794460 GASTROINTESTINAL OR GI OR ULCER OR DUODENAL OR DYSPEPSIA OR  
IRRITABLE BOWEL SYNDROME OR IBS

=> s chemotherapy (s) nausea  
L5 10475 CHEMOTHERAPY (S) NAUSEA

=> s 14 or 15  
L6 803310 L4 OR L5

=> s 16 and 14  
L7 794460 L6 AND L4

=> s 17 and 12  
L8 17 L7 AND L2

=> dup rem  
ENTER L# LIST OR (END):18  
DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.  
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE  
PROCESSING COMPLETED FOR L8  
L9 14 DUP REM L8 (3 DUPLICATES REMOVED)

=> d 19 1-9 ibib, kwic

L9 ANSWER 1 OF 14 USPATFULL

ACCESSION NUMBER: 2001:150582 USPATFULL  
TITLE: Compositions of optically pure (+) norcisapride  
INVENTOR(S): McCullough, John R., Hudson, MA, United States  
Jerussi, Thomas P., Framingham, MA, United States  
PATENT ASSIGNEE(S): Sepracor Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2001020031	A1	20010906
APPLICATION INFO.:	US 2001-809165	A1	20010316 (9)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-573423, filed on 18 May 2000, GRANTED, Pat. No. US 6242465 Continuation of Ser. No. US 1998-123892, filed on 28 Jul 1998,		
GRANTED,	Pat. No. US 6147093 Continuation-in-part of Ser. No.		
US	1997-905941, filed on 5 Aug 1997, GRANTED, Pat. No. US 5877188 Division of Ser. No. US 1996-684753, filed on 19 Jul 1996, GRANTED, Pat. No. US 5739151		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	APPLICATION		
LEGAL REPRESENTATIVE:	PENNIE & EDMONDS LLP, 1667 K STREET NW, SUITE 1000, WASHINGTON, DC, 20006		
NUMBER OF CLAIMS:	24		
EXEMPLARY CLAIM:	1		
LINE COUNT:	1069		
CAS INDEXING IS AVAILABLE FOR THIS PATENT.			
SUMM	. . . The present invention relates to methods and compositions for treating central nervous system ("CNS") disorders, emesis, and disorders		
	associated with gastrointestinal motility dysfunction. In another aspect, this invention relates to metabolites of cisapride and optical isomers of such metabolites.		
SUMM	. . . 5,057,525 and 5,137,896 (collectively "Van Daele") disclose N-(3-hydroxy-4-piperidenyl)benzamides including cisapride. These		

compounds are said to stimulate the motility of the **gastrointestinal** system. Van Daele states that the cis and trans diastereomeric racemates of these compounds may be obtained separately by conventional. . . .

SUMM . . . . regard, it was discovered that a major site of production and storage of serotonin is the enterochromaffin cell of the **gastrointestinal** mucosa. It was also discovered that serotonin has a powerful stimulating action on intestinal motility by stimulating intestinal smooth muscle,. . . .

SUMM [0008] Because of their modulation of the serotonin neuronal system in the **gastrointestinal** tract, many of the benzamide derivatives are often effective antiemetic agents and are commonly used to control vomiting during cancer **chemotherapy** or radiotherapy, especially when highly emetogenic compounds such as cisplatin are used (See: Costall et al., Neuropharmacology 26: 1321-1326, 1987).. . . .

as the serotonin M-receptor (See: Clarke et al., Trends in Pharmacological Sciences 10: 385-386, 1989). Chemo- and radio-therapy may induce **nausea** and vomiting by the release of serotonin from damaged enterochromaffin cells in the **gastrointestinal** tract. Release of the neurotransmitter serotonin stimulates both afferent vagal nerve fibers (thus initiating the vomiting reflex) and serotonin receptors.

SUMM [0009] A second prominent action of the benzamide derivatives is in augmenting **gastrointestinal** smooth muscle activity from the esophagus to the proximal small bowel, thus accelerating esophageal and small intestinal transit as well. . . .

SUMM [0013] Because of its activity as a prokinetic agent, cisapride may also

be useful to treat **dyspepsia**, gastroparesis, constipation, postoperative ileus, and intestinal pseudo-obstruction.

SUMM [0014] **Dyspepsia** is a condition characterized by an impairment of the power or function of digestion that can arise as a symptom of a primary **gastrointestinal** dysfunction or as a complication due to other disorders such as appendicitis, gallbladder disturbances, or malnutrition. Gastroparesis is a paralysis. . . .

SUMM . . . . due to rapid first pass metabolism in the liver (See: Van Peer et al., in Progress in the Treatment of **Gastrointestinal** Motility Disorders: The Role of Cisapride. Proceedings of a Symposium

in Frankfurt. November 1986. Johnson A. G. and Lux, G.. . . .  
SUMM . . . . disease and such other conditions as may be related to the activity of (+) norcisapride as a prokinetic agent, e.g., **dyspepsia**, gastroparesis, constipation, post-operative ileus, and intestinal pseudo-obstruction. In addition, optically pure (+) norcisapride may be used to treat such conditions. . . .

SUMM . . . . conditions that may be related to the activity of (+) norcisapride as a prokinetic agent, including but not limited to **dyspepsia**, gastroparesis, constipation, and intestinal pseudo-obstruction. Moreover, optically pure (+) norcisapride may be used to treat these conditions while substantially reducing. . . .

SUMM [0034] A further aspect of the present invention includes a method of treating a condition caused by **gastrointestinal** motility dysfunction in a human which comprises administering to a human in need of treatment for **gastrointestinal** motility dysfunction, a therapeutically effective amount of (+) norcisapride, or a pharmaceutically acceptable salt thereof, substantially free of its (-) stereoisomer. Conditions caused by **gastrointestinal** motility dysfunction in a human include, but are not limited to,

gastro-esophageal reflux disease, **dyspepsia**, gastroparesis, constipation, post-operative ileus, and intestinal pseudo-obstruction.

SUMM [0035] Furthermore, the present invention includes a pharmaceutical composition for treating a condition caused by **gastrointestinal** motility dysfunction in a human, which comprises (+) norcisapride, or a pharmaceutically acceptable salt thereof, substantially free of its (-).

SUMM [0042] The term "adverse effects" includes, but is not limited to, **gastrointestinal** disorders such as diarrhea, abdominal cramping, and abdominal grumbling; tiredness; headache; cardiac depression; increased systolic pressure; increased heart rate; neurological.

SUMM . . . terms "eliciting an antiemetic effect" and "antiemetic therapy"

as used herein mean providing relief from or preventing the symptoms of **nausea** and vomiting induced spontaneously or associated with emetogenic cancer **chemotherapy** or irradiation therapy.

SUMM [0045] The term "treating a condition caused by **gastrointestinal** motility dysfunction" as used herein means treating the symptoms and conditions associated with this disorder which include, but are not limited to, gastroesophageal reflux disease, **dyspepsia**, gastroparesis, constipation, postoperative ileus, and intestinal pseudo-obstruction.

SUMM [0046] The term "prokinetic" as used herein means the enhancement of peristalsis in, and thus the movement through the **gastrointestinal** tract.

SUMM [0048] The term "**dyspepsia**" as used herein means a condition characterized by an impairment of the power or function of digestion that can arise as a symptom of a primary **gastrointestinal** dysfunction or as a complication due to other disorders such as appendicitis, gallbladder disturbances, or malnutrition.

DETD [0083] **5HT1A** Receptor Activity Receptor selection and amplification technology (R-SAT) was used (Receptor Technologies Inc., Winooski, Vt.) to determine potential agonist and/or **antagonist** activity of racemic norcisapride, cisapride and their enantiomers on cloned human serotonin 5-HT.sub.1A receptor subtypes expressed in NIH 3T3 cells.

CLM What is claimed is:

1. A method of treating or preventing a disorder caused by **gastrointestinal** motility dysfunction in a human which comprises administering to said human a therapeutically effective amount of (+) norcisapride, or a . . .
3. The method of claim 1, wherein said disorder is **dyspepsia**.

L9 ANSWER 2 OF 14 USPATFULL

ACCESSION NUMBER: 2001:112329 USPATFULL

TITLE: Octahydrobenzo[f]quinoline-based receptor agonists and antagonists

INVENTOR(S): Froimowitz, Mark, Newton, MA, United States  
Jacob, James N., Saunderstown, RI, United States

PATENT ASSIGNEE(S): The Board of Governors for Higher Education,  
Providence, RI, United States (U.S. corporation)  
The State of Rhode Island and Providence Plantations.,  
Providence, RI, United States (U.S. state government)

	NUMBER	KIND	DATE
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PATENT INFORMATION:	US 6262064	B1	20010717

APPLICATION INFO.: US 1999-237390 19990126 (9)  
RELATED APPLN. INFO.: Continuation of Ser. No. US 1996-666286, filed on 26  
Sep 1996, now patented, Pat. No. US 5863928  
Continuation of Ser. No. WO 1993-US11302, filed on 19  
Nov 1993  
DOCUMENT TYPE: Utility  
FILE SEGMENT: GRANTED  
PRIMARY EXAMINER: Huang, Evelyn Mei  
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.  
NUMBER OF CLAIMS: 6  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 1196

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . composition is a composition with a binding affinity for a  
receptor, wherein said composition can act as an agonist, an  
**antagonist** or a mixed agonist/**antagonist** to the  
receptor. Examples of receptors, for which the compositions of this  
invention are useful, include D2, D4, 5HT1, **5HT1A**, 5HT2,  
.alpha.1 and .alpha.2 receptors.  
DETD . . . Binding was then terminated by dilution of the assay with a  
cold buffer, followed by rapid vacuum filtration onto Whatman **GI**  
/C filters that were presoaked in 0.1% polyethylene imine for at least  
3  
hours. Radioactivity trapped onto the filters was determined. . .

L9 ANSWER 3 OF 14 CA COPYRIGHT 2001 ACS DUPLICATE 1  
ACCESSION NUMBER: 133:247090 CA  
TITLE: The putative 'silent' 5-HT1A receptor antagonist, WAY  
100635, has inverse agonist properties at cloned  
human  
5-HT1A receptors  
AUTHOR(S): Cosi, C.; Koek, W.  
CORPORATE SOURCE: Division de Neurobiologie II, Centre de Recherche  
Pierre Fabre, Castres, 80106, Fr.  
SOURCE: Eur. J. Pharmacol. (2000), 401(1), 9-15  
CODEN: EJPHAZ; ISSN: 0014-2999  
PUBLISHER: Elsevier Science B.V.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
REFERENCE COUNT: 18  
REFERENCE(S): (1) Assie, M; Eur J Pharmacol 1996, V304, P15 CA  
(2) Barr, A; J Biol Chem 1997, V272(52), P32979 CA  
(3) Costa, T; Mol Pharmacol 1990, V37, P383 CA  
(4) Costa, T; Mol Pharmacol 1992, V41, P549 CA  
(5) Fargin, A; J Biol Chem 1989, V264, P14848 CA  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Agonist binding to G protein-coupled receptors induces the formation of a  
receptor-G protein complex and subsequent GDP/GTP (GDP/GTP) exchange.  
Some receptors, however, form receptor-G protein complexes and promote  
GDP/GTP exchange even when not occupied by agonists. Such receptors  
preferentially activate pertussis toxin-sensitive G proteins (i.e.,  
Gi/Go), and the interactions of receptors and G proteins are  
affected by monovalent cations (most notably Na+), both in the occupied  
and unoccupied state. We investigated the effects of Na+ on the  
intrinsic  
activity of 5-hydroxytryptamine1A (5-HT1A) receptor ligands, measured as  
maximal effect (EMAX), using guanosine 5'-0-(3-[35S]thio)-triphosphate  
([35S]GTP.gamma.S) binding to membranes prepd. from human epithelioid  
carcinoma (HeLa) cells, expressing 500 fmol/mg protein of cloned human

5-HT1A receptor (HA7 cells). A decrease of the NaCl concn. decreased the maximal effect of serotonin, increased basal [35S]GTP.gamma.S binding, and increased the neg. intrinsic activity of spiperone and

N-2-[4-(2-methoxyphenyl)-1-piperazinyl]-N-(2-pyridinyl)cyclohexanecarboxamide (WAY 100635). This ability of WAY 100635 to decrease basal [35S]GTP.gamma.S binding was antagonized by (S)-N-tert-butyl-3-(4-(2-methoxyphenyl)piperazine-1-yl)-2-phenylpropanamide ((S)-WAY 100135) (pA2=7.77). Further, WAY 100635 was able to antagonize carboxamidotryptamine (5-CT)-stimulated [35S]GTP.gamma.S binding with a pA2 of 9.9, in std. NaCl conditions, and of 9.7, in the absence of NaCl. Changes in membrane concn. did not affect the ability of WAY 100635 to decrease [35S]GTP.gamma.S binding. WAY 100635 did not affect basal [35S]GTP.gamma.S binding to membranes from untransfected HeLa cells. Pertussis toxin (200 ng/mL) prevented WAY 100635 and spiperone to decrease

[35S]GTP.gamma.S binding, showing that their effects were mediated by G proteins of the Gi/Go family. In conclusion, the constitutive and stimulated activity of human 5-HT1A receptors expressed in HA7 cells is sodium-dependent, which allowed to confirm the 5-HT1A inverse agonist properties of spiperone, and to show that WAY 100635 is an inverse agonist

at 5-HT1A receptors that inhibits basal [35S]GTP.gamma.S binding to a lesser extent than spiperone. [35S]GTP.gamma.S binding to membranes from HA7 cells under low NaCl conditions appears to be esp. suitable to evidence and pharmacol. analyze the inverse agonist properties of 5-HT1A receptor ligands.

ST WAY100635 sodium **5HT1A** receptor **antagonist**

L9 ANSWER 4 OF 14 PROMT COPYRIGHT 2001 Gale Group

ACCESSION NUMBER: 1999:850552 PROMT  
TITLE: AstraZeneca unveils promising portfolio with 57 NCEs.  
SOURCE: Marketletter, (20 Dec 1999) .  
ISSN: 0951-3175.  
PUBLISHER: Marketletter Publications Ltd.  
DOCUMENT TYPE: Newsletter  
LANGUAGE: English  
WORD COUNT: 1182  
\*FULL TEXT IS AVAILABLE IN THE ALL FORMAT\*

TX The . . . is now focusing on seven therapeutic areas, is confident that it will be the world's number one in four markets:

**gastrointestinal**; cardiovascular; oncology; and pain control. It is also optimistic about its respiratory program, where it aims to maintain its number. . .

Cardiovascular

ZD6169	K+ channel opener
ZD7851/9720	OSC inhibitors
ZD1611/4054	Endothelin A antagonists

**Gastrointestinal**

ropivacaine gel	Inflammatory bowel disease
PTH	Osteoporosis

Oncology

ZD2767/9063	Antibody-directed enzyme prodrugs
ZD4190	VTK

ZD9481	Tyrosine kinase inhibitor
--------	---------------------------

ZD0101	Anti-angiogenic
--------	-----------------

ZD3980	Anti-androgen
--------	---------------

Respiratory



rofleponide		Asthma				
TH2 project		Asthma				
Mast. . .						
NEW . . .	Thromb inhibitor(oral)	Thrombosis	III	2Q 2001	2Q	
2001						
H376/95	Thromb inhibitor(oral)	Prev of stroke	II	4Q 2003	4Q	
2003						
AR-C 69931	P2T <b>antagonist</b> (iv)	TBD	II	>2002		
>2002						
AR-C 126532	P2T antag(oral)	Arterial thromb	I	2005		
2005						
H327/86	Immunomodulator	TBD	II	>2002		
>2002						
AR-H039242	PPAR agonist	Insulin resistance	II	2003		
2003						
ZD4927	Factor Xa inhibitor	Thrombosis	I	>2002		
>2002						
H409/22	NPY <b>antagonist</b>	TBD	II	>2002		
>2002						
H345/52	Class III antiarryth(iv)	TBD	II	>2002		
>2002						
AR-H050642	Class III antiarryth(oral)	Atrial fibr	PC	2005		
2005						
Atacand/HTCZ	Angio II antag	Hypertension	Filed			
ZD0947	K+ channel opener	Urin incont	I	>2002		
>2002						
<b>Gastrointestinal</b>						
esomeprazole	Acid pump inhib	Acid-related GI	Filed			
mosapride	5HT modulator	<b>Dyspepsia</b>	II	TBD		
TBD						
RAPID	Rev acid pump inhib	Acid-related GI	I	2004		
2004						
rofleponide	Topical steroid	<b>IBS</b>	PC	2004		
2004						
Helicobac	Vaccine	Helico eradicat	PC	2007		
2007						
Helicobac	Oral treatment	Helico eradicat	PC	2007		
2007						
<b>Oncology</b>						
Faslodex	Antiestrogen	Breast cancer. . .	opioid			
Acute/chronic						
pain	PC					
Oral glycine	NMDA antag	Neuropathic pain	PC			
CNS						
Zendra	GABA modulator	Stroke	III	4Q 2001	1Q	
2001						
AR-R15896	NMDA <b>antagonist</b>	Stroke	II	3Q 2002		
3Q 2002						
NXY-059	Radical scavenger	Stroke	II	3Q 2002	3Q	
2002						
NAD299	<b>5HT1A antagonist</b>	Anx/depression	II			
>2002	>2002					
AR-A2	<b>5HT1B antagonist</b>	Anx/depression	PC	>2002		
>2002						
remacemide	NMDA <b>antagonist</b>	Epilepsy	III	>2002		
>2002						
>2002		Parkinson's disease	II	>2002		
2001		Huntington's chorea	III	3Q 2001	3Q	

Infection  
AZD2563 Oxazolidinone Gram-positive infects. . .

L9 ANSWER 5 OF 14 USPATFULL

ACCESSION NUMBER: 1999:24695 USPATFULL  
TITLE: Method of treatment for malaria utilizing serotonin  
receptor ligands  
INVENTOR(S): McConnell, Bruce, Albuquerque, AZ, United States  
Locher, Christopher P., San Francisco, CA, United  
States  
PATENT ASSIGNEE(S): The University of Hawaii, Honolulu, HI, United States  
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5874477		19990223
APPLICATION INFO.:	US 1994-289379		19940812 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	MacMillan, Keith D.		
LEGAL REPRESENTATIVE:	Gray, Cary, Ware & Freidenrich, LLP, Reiter, Stephen E., Kleinsmith, David F.		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	1 Drawing Figure(s); 1 Drawing Page(s)		
LINE COUNT:	645		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . use of many existing anti-malaria drugs because of the side  
effects they produce in patients. For example, chloroquine can cause  
**gastrointestinal** disturbances, visual disturbances, irreversible  
damage to the retina, skin reactions, hair loss and hair  
depigmentation.

Furthermore, chloroquine must be used. . .

DETD . . . constant less than 10 nanomolar. Thus, while both ketanserin  
and spiperone (5HT2 identifying compounds) can be shown to bind to  
**5HT1a** receptors, they do not qualify as identifying ligands for  
the **5HT1a**, owing to a dissociation constant between 10 and  
1000 nM for **5HT1a**. The definition of any chemical compound as  
an anti-malarial will be established by the ability of this compound to  
compete. . . ligand and anti-malarial, regardless of whether the  
actual functional receptor in anti-malarial activity can or cannot be  
established unequivocally as **5HT1a**, 5HT2 (a or b) or 5HT1c,  
subsequently. While any compound displacing a radioligand from the  
receptor with medium or high affinity qualifies as a ligand, its  
qualification as an anti-malarial candidate through further  
demonstration of its possible agonist, **partial agonist**  
or **antagonist** activity is supportive, but not necessary.

DETD . . . subtype sites, i.e. the ability to compete with any  
subtype-identifying compound, rather than to its actual function as  
agonist or **antagonist** at 5HT receptor subtype site. It should  
be recognized that the 5HT receptors operating in any anti-malarial  
system involving erythrocytes. . . of the identifying radioligand.  
Such binding assays have indicated that 8-hydroxy-DPAT and 5-methoxy-N,  
N-dimethyltryptamine (DMT) are identifying ligands for the **5HT1a**  
serotonin receptor subtype and ketanserin and spiperone are identifying  
ligands for the 5HT2 (a or b) and 5HT1c receptor subtypes.

DETD TABLE I

50%  
PARASITE

SEROTONIN RECEPTOR LIGAND	RECEPTOR SPECIFICITY	LIGAND FUNCTION	GROWTH INHIBIT.. <sup>(1)</sup> CONC. OF LIGAND IC.sub.50.sup.(2) (.mu.g/ml) CPM's
---------------------------------	-------------------------	--------------------	--

8-hydroxy	<b>5HT1a</b>	Agonist	0.125      900
DPAT(1).sup.(3)			
DOI(9).sup.(4)	<b>5HT2</b>	Agonist	0.250      2055
2C-B(9).sup.(5)	<b>5HT2</b>	Agonist	0.500      1678
Serotonin	<b>5HT1a, 5HT2,</b>	Agonist	>10      (>4000)
	a,b,c		0
Spiperone	<b>5HT2, 5HT1a</b>	<b>Antagonist</b>	
			1.25      2591
Ritanserlin	<b>5HT2</b>	<b>Antagonist</b>	
			2.50      2913
Ketanserlin	<b>5HT2</b>	<b>Antagonist</b>	
			5.00      1592
DMT.sup.(6)	<b>5HT2</b>	Agonist	.gtoreq.10 (>4000) 0

##STR19##

where Control CPM (from 3 wells w/o drug) = 3977 CPM

Background. . .

DETD To quantitate the physiological response of malaria parasites to serotonin receptor (**5HT1a** and **5HT2**) ligands, a patch-clamp technique can be used to (1) identify and locate the actual receptor within a lysis. . . remnant of the invaginated erythrocyte membrane that encloses the parasite; (2) characterize the basis of the parasite's physiological response to **5HT1a** and **5HT2** agonists; (3) characterize the transport properties of these receptors and ascribed a functional definition, i.e., nutrient permeable channel. . . 15, 1993); and (4) identify the mechanism of action of serotonin receptor ligands on the malaria parasite, i.e., agonist or **antagonist**.

L9 ANSWER 6 OF 14 USPATFULL

ACCESSION NUMBER: 1999:12937 USPATFULL

TITLE: Octahydrobenzo[f]quinoline-based receptor agonists and antagonists

INVENTOR(S): Froimowitz, Mark, Newton, MA, United States  
Jacob, James N., SaundersTown, RI, United States

PATENT ASSIGNEE(S): The Board of Governors for Higher Education the State  
of Rhode Island and Providence Plantation.,  
Providence,

RI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5863928		19990126
	WO 9514006		19950526 ##STR1##
APPLICATION INFO.:	US 1996-666286		19960926 (8)
	WO 1993-US11302		19931119
			19960926 PCT 371 date
			19960926 PCT 102(e) date

DOCUMENT TYPE: Utility  
FILE SEGMENT: Granted  
PRIMARY EXAMINER: Huang, Evelyn  
LEGAL REPRESENTATIVE: Hamilton, Brook, Smith & Reynolds, P.C.  
NUMBER OF CLAIMS: 11  
EXEMPLARY CLAIM: 1  
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 2 Drawing Page(s)  
LINE COUNT: 1250

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD . . . composition is a composition with a binding affinity for a receptor, wherein said composition can act as an agonist, an **antagonist** or a mixed agonist/**antagonist** to the receptor. Examples of receptors, for which the compositions of this invention are useful, include D2, D4, 5HT1, **5HT1A**, 5HT2, .alpha.1 and .alpha.2 receptors.

DETD . . . Binding was then terminated by dilution of the assay with a cold buffer, followed by rapid vacuum filtration onto Whatman **GI** /C filters that were presoaked in 0.1% polyethylene imine for at least

3

hours. Radioactivity trapped onto the filters was determined. . .

L9 ANSWER 7 OF 14 CA COPYRIGHT 2001 ACS DUPLICATE 2  
ACCESSION NUMBER: 128:294709 CA  
TITLE: Heterocyclyloxyalkanamines having effects on serotonin-related systems  
INVENTOR(S): Hibschan, David J.; Krushinski, Joseph H., Jr.; Rasmussen, Kurt; Rocco, Vincent P.; Schaus, John M.; Thompson, Dennis C.  
PATENT ASSIGNEE(S): Eli Lilly and Co., USA  
SOURCE: U.S., 65 pp. Cont.-in-part of U.S. Ser. No. 373,823, abandoned.  
CODEN: USXXAM  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 6  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5741789	A	19980421	US 1995-467434	19950606
CN 1178530	A	19980408	CN 1996-192598	19960111
US 6172073	B1	20010109	US 1998-49837	19980327
PRIORITY APPLN. INFO.:			US 1995-373823	B2 19950117
			US 1995-467434	A3 19950606

OTHER SOURCE(S): MARPAT 128:294709

ST heterocyclyloxyalkanamine prepn serotonin 1A antagonist; serotonin 1A antagonist reuptake inhibitor heterocyclyloxyalkanamine; antidepressant heterocyclyloxyalkanamine prepn; nicotine withdrawal treatment heterocyclyloxyalkanamine prepn; indolyloxyalkanamine prepn **5HT1A antagonist**; quinolinyloxyalkanamine prepn **5HT1A antagonist**

IT    **Gastrointestinal** motility  
      (treatment of disorders; prepn. of heterocyclyloxyalkanamines as  
      serotonin 1A antagonists and reuptake inhibitors)

L9    ANSWER 8 OF 14    USPATFULL

ACCESSION NUMBER:       1998:154132    USPATFULL

TITLE:                   Recombinant expression vectors for expression of  
                         heterologous proteins

INVENTOR(S):            Pausch, Mark H., Robbinsville, NJ, United States  
                         Ozenberger, Bradley A., Yardley, PA, United States  
                         Hadcock, John R., Mount Holly, NJ, United States  
                         Price, Laura A., Langhorne, PA, United States  
                         Kajkowski, Eileen M., Ringoes, NJ, United States  
                         Kirsch, Donald R., Princeton, NJ, United States  
                         Chaleff, Deborah T., Pennington, NJ, United States  
PATENT ASSIGNEE(S):    American Cyanamid Company, Madison, NJ, United States  
                         (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5846819		19981208
APPLICATION INFO.:	US 1995-472045		19950606    (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-195729, filed on 14 Feb 1994		
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	Granted		
PRIMARY EXAMINER:	Walsh, Stephen		
ASSISTANT EXAMINER:	Basham, Daryl A.		
LEGAL REPRESENTATIVE:	Matthews, Gale F.		
NUMBER OF CLAIMS:	14		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	44 Drawing Figure(s); 28 Drawing Page(s)		
LINE COUNT:	2790		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD    Expression of the human **5HT1a** serotonergic receptor. The gene  
         encoding the human **5HT1a** receptor is modified to add the first  
         14 amino acids of the yeast Ste2 protein, cloned into the expression  
         plasmid. . . grown in medium containing galactose to induce receptor  
         expression, fractioned and tested for receptor activity by binding of  
         the radiolabelled **antagonist** .sup.3 H-spiperone. Saturation  
         binding demonstrates that the receptor is expressed at high levels  
         (B.sub.max =3.2 pmol/mg protein) and that it. . .

DETD    Two chimeric receptor genes are engineered; in pCH17, sequences  
encoding  
         the N-terminus including the first two transmembrane domains of the  
         **5HT1a** receptor are replaced with the corresponding sequences of  
         the Ste2 receptor, and in pCH18, these Ste2 sequences are added  
         directly to the N-terminus of the **5HT1a** receptor to create a  
         novel nine-transmembrane-domain receptor (FIG. 4). Strains expressing  
         these receptors are examined for binding of radiolabelled ligand. Both  
         receptors demonstrate specific binding of the 5HT receptor  
         **antagonist** .sup.3 H-spiperone (FIG. 4). Replacement of the first  
         two transmembrane domains with those of an unrelated receptor does not  
         apparently. . .

DETD    . . . of CCK antagonists make them excellent candidates for  
treatment

         of pancreatitis, pancreatic cancer, biliary colic, disorders of gastric  
         emptying, and **irritable bowel syndrome**.  
         CCK antagonists reverse the development of satiety and might be useful  
         in improving appetite in anorectic patients or others that. . .

DETD 6. Wank, S. A., J. R. Pisenga, and A. de Weerth. 1992. Brain and **gastrointestinal** cholecystokinin receptor family: Structure and function. Proc. Natl. Acad. Sci. USA 89: 8691-8695.

DETD . . . and S. Seino. 1992. Cloning and functional characterization of a family of human and mouse somatostatin receptors expressed in brain, **gastrointestinal** tract, and kidney. Proc. Natl. Acad. Sci. USA 89: 251-255.

DETD . . . and S. Seino. 1992. Cloning and functional characterization of a family of human and mouse somatostatin receptors expressed in brain, **gastrointestinal** tract, and kidney. Proc. Natl. Acad. Sci. USA 89: 251-255.

L9 ANSWER 9 OF 14 BIOSIS COPYRIGHT 2001 BIOSIS

ACCESSION NUMBER: 1999:13135 BIOSIS

DOCUMENT NUMBER: PREV199900013135

TITLE: Serotonin depresses excitatory synaptic transmission and depolarization-evoked Ca<sup>2+</sup> influx in rat basolateral amygdala via 5-HT<sub>1A</sub> receptors.

AUTHOR(S): Cheng, Li-Ling; Wang, Su-Jane; Gean, Po-Wu (1)

CORPORATE SOURCE: (1) Dep. Pharmacol., Coll. Med., Natioanl Cheng-Kung Univ.,

Tainan City 701 Taiwan

SOURCE: European Journal of Neuroscience, (June, 1998) Vol. 10, No.

6, pp. 2163-2172.

ISSN: 0953-816X.

DOCUMENT TYPE: Article

LANGUAGE: English

AB. . . pertussis toxin pretreatment did not affect the depressing effect of

5-HT suggesting that it is not mediated through activation of G<sub>i</sub> /o protein-coupled K<sup>+</sup> conductance. The sensitivity of postsynaptic neurons

to glutamate receptor agonist was unaltered by the 5-HT pretreatment. In addition,. . . action. The effect of 5-HT was mimicked by the selective

5-HT<sub>1A</sub> agonist 8-hydroxy-dipropylaminotetralin (8-OH-DPAT) and was blocked

by the selective **5HT<sub>1A</sub> antagonist** 1-(2-methoxyphenyl)-4(4-(2-phthalimido)butyl)piperazine oxadiazol-3-yl)methyl)phenyl)methanesulphonamide. In contrast, the selective 5-HT<sub>2</sub> receptor **antagonist** ketanserin failed to affect the action of 5-HT. The effects of 5-HT and 8-OH-DPAT on the high K<sup>+</sup>-induced increase in. . . concentration-dependent manner. The effect of 5-HT was completely abolished in slices pretreated with Rp-cyclic adenosine 3',5'-monophosphothioate (Rp-cAMP), a regulatory site **antagonist** of protein kinase A, suggesting that 5-HT may act through a

cAMP-dependent

mechanism. Taken together, these results suggest that functional. . .

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
125.56	125.71

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

SINCE FILE	TOTAL
ENTRY	SESSION
-0.56	-0.56

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COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.00	125.71
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.56

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=> FIL MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	0.75	126.46
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	0.00	-0.56

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FILE 'PROMT' ENTERED AT 19:20:42 ON 27 DEC 2001  
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=> s racemic pindolol  
L10 100 RACEMIC PINDOLOL

=> s racemic (s) pindolol  
L11 255 RACEMIC (S) PINDOLOL

=> d his

(FILE 'HOME' ENTERED AT 19:05:05 ON 27 DEC 2001)

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
ENTERED AT 19:05:16 ON 27 DEC 2001

L1 159 S 5HT1A ANTAGONIST OR 5HT1A PARTIAL AGONIST  
L2 435 S 5HT1A (S) ANTAGONIST OR 5HT1A (S) PARTIAL AGONIST  
L3 29438 S ?PINDOLOL  
L4 794460 S GASTROINTESTINAL OR GI OR ULCER OR DUODENAL OR DYSPEPSIA OR  
I  
L5 10475 S CHEMOTHERAPY (S) NAUSEA  
L6 803310 S L4 OR L5  
L7 794460 S L6 AND L4  
L8 17 S L7 AND L2  
L9 14 DUP REM L8 (3 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:17:14 ON 27 DEC 2001

FILE 'HOME' ENTERED AT 19:17:55 ON 27 DEC 2001

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
ENTERED AT 19:20:42 ON 27 DEC 2001

L10 100 S RACEMIC PINDOLOL  
L11 255 S RACEMIC (S) PINDOLOL

=> s l4 and l11

L12 2 L4 AND L11

=> dup rem

ENTER L# LIST OR (END):112

DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.

ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE

PROCESSING COMPLETED FOR L12

L13 2 DUP REM L12 (0 DUPLICATES REMOVED)

=> d l13 1-2 bib, ab, kwic

L13 ANSWER 1 OF 2 USPATFULL  
AN 2001:231308 USPATFULL  
TI Methods of treating and preventing attention deficit disorders  
IN Jerussi, Thomas P., Framingham, MA, United States  
Senanayake, Chrisantha H., Shrewsbury, MA, United States  
Fang, Qun K., Wellesley, MA, United States  
PA Sepracor, Inc., Marlborough, MA, United States (U.S. corporation)  
PI US 6331571 B1 20011218  
AI US 1999-372158 19990811 (9)  
PRAI US 1998-97665 19980824 (60)  
US 1998-99306 19980902 (60)  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Jarvis, William R. A.  
LREP Pennie & Edmonds LLP  
CLMN Number of Claims: 4  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 1900



AB Methods are disclosed for the treatment and prevention of affective disorders with racemic or optically pure sibutramine metabolites and pharmaceutically acceptable salts, solvates, and clathrates thereof.

SUMM Sibutramine is rapidly absorbed from the **gastrointestinal** tract following oral administration and undergoes an extensive first-pass metabolism that yields the primary metabolites, desmethylsibutramine and didesmethylsibutramine, shown below.. . .

SUMM The invention further encompasses methods of using and pharmaceutical compositions comprising a **racemic** or optically pure sibutramine metabolite, or a pharmaceutically acceptable salt, solvate, or clathrate thereof, in combination with a 5-HT.sub.1A receptor. . . . can be used in the methods and compositions of the invention include, but are limited to: alprenolol; WAY 100135; spiperone; **pindolol**; (S)-UH-301; penbutolol; propranolol; tertatolol; a compound of the formula I as disclosed in U.S. Pat. No. 5,552,429, which is incorporated. . . .

SUMM Disorders that can be treated or prevented using a **racemic** or optically pure sibutramine metabolite, or a pharmaceutically acceptable salt, solvate, or clathrate thereof, in combination with a .beta.-adrenergic antagonist include, but are not limited to, post myocardial infarction depression. Specific .beta.-adrenergic antagonists include, but are not limited to, S(-)-**pindolol**, penbutolol, and propranolol.

SUMM           alprazolam;           quazepam;           alprenolol;  
brotizolam;           temazepam;           WAY 100135;  
chlordiazepoxide; triazolam;           spiperone;  
clobazam;           chlorpromazine;           S(-)-**pindolol**;  
clonazepam;           mesoridazine;           R(+)-**pindolol**;  
clorazepate;           thioridazine;           **racemic pindolol**;  
demoxepam;           acetophenazine;           (S)-UH-301;  
diazepam;           fluphenazine;           penbutolol;  
estazolam;           perphenazine;           propranolol;  
flumazenil;           trifluoperazine;           tertatolol;  
flurazepam;           chlorprothixene;           desipramine;  
halazepam;           thiothixene;           clonidine;  
lorazepam;           clozapine; . . .

L13 ANSWER 2 OF 2 BIOSIS COPYRIGHT 2001 BIOSIS

AN 1983:294157 BIOSIS

DN BA76:51649

TI ALPHA-2 ADRENERGIC RECEPTOR IN INTESTINAL EPITHELIAL CELLS IDENTIFICATION BY TRITIUM LABELED YOHIMBINE AND FAILURE TO INHIBIT CYCLIC AMP ACCUMULATION.

AU NAKAKI T; NAKADATE T; YAMAMOTO S; KATO R

CS DEP. OF PHARMACOL., KEIO UNIV. SCH. OF MED., 35 SHINANOMACHI, SHINJUKU-KU, TOKYO 160, JPN.

SO MOL PHARMACOL, (1983) 23 (1), 228-234.

CODEN: MOPMA3. ISSN: 0026-895X.

FS BA; OLD

LA English

AB .alpha.2-Adrenergic receptors in isolated rat intestinal epithelial cells were identified by using the .alpha.2-selective antagonist [3H]yohimbine. The contamination of .alpha.2-adrenergic receptors in presynaptic nerve endings was ruled out by EM observations. The [3H]yohimbine binding to

the

100,000 .times. g pellet from the epithelial cells was saturable and of high affinity. Scatchard analysis yielded a Kd of 6.0 nM with a Bmax [maximum binding] of 37 fmoles of sites/mg protein. The binding was rapid

and reversible. No cooperative interactions among the binding sites were observed. Inhibition of yohimbine binding by adrenergic agonists yielded the .alpha.2-adrenergic potency series: clonidine > (+-)-nordefrin > (-)-norepinephrine > (-)-epinephrine .mchgt. methoxamine > (-)-phenylephrine >>> (-)-isoproterenol. (-)-Isomers were more potent than (+)-isomers. The antagonist potency series also showed .alpha.2-adrenergic specificity: yohimbine > dihydroergocryptine .mchgt. prazosin > phenoxybenzamine > propranolol. The inhibition potencies of [3H]yohimbine binding by .alpha.2-adrenergic agonists were correlated with those of the same agents for antidiarrheal effects in vivo. Clonidine (1 .mu.M) failed to reduce the cAMP levels augmented by prostaglandin E1 (PGE1) (30 .mu.M) or vasoactive intestinal peptide in the presence of 3-isobutyl-1-methyl-xanthine in these isolated cells. Epinephrine (10 .mu.M) in the absence or presence of pindolol (10 .mu.M) did not reduce the PGE1-augmented cAMP levels. The intestinal epithelial cells evidently contain .alpha.2-adrenergic receptors through which .alpha.2-adrenergic agonists may exert their antidiarrheal effect. The antidiarrheal effect of .alpha.2-adrenergic agonists may not be due to the inhibition of adenylate cyclase in these cells.

#### IT Miscellaneous Descriptors

RAT CLONIDINE PRAZOSIN **RACEMIC** NORDEFIN PHENOXYBENZAMINE  
 LEVO NOREPINEPHRINE PROPRANOLOL LEVO EPINEPHRINE METHOXAMINE LEVO  
 PHENYLEPHRINE LEVO ISOPROTERENOL DI HYDRO ERGOCRYPTINE **PINDOLOL**  
 AUTONOMIC-DRUG PROSTAGLANDIN E-1 EPINEPHRINE HORMONE-DRUG  
**GASTROINTESTINAL-DRUG ANTI DIARRHEAL PHARMACODYNAMICS**

#### => FIL REGISTRY

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	26.75	153.21
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-0.56

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 DICTIONARY FILE UPDATES: 26 DEC 2001 HIGHEST RN 378741-70-9

TSCA INFORMATION NOW CURRENT THROUGH July 7, 2001

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Crossover limits have been increased. See HELP CROSSOVER for details.

Calculated physical property data is now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> s pindolol/cn  
L14 1 PINDOLOL/CN

=> d l14

L14 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
RN 13523-86-9 REGISTRY  
CN 2-Propanol, 1-(1H-indol-4-yloxy)-3-[(1-methylethyl)amino]- (9CI) (CA  
INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propanol, 1-(indol-4-yloxy)-3-(isopropylamino)- (8CI)

OTHER NAMES:

CN (.+-.)-4-[2-Hydroxy-3-(isopropylamino)propoxy]indole

CN (.+-.)-LB 46

CN (.+-.)-Pindolol

CN (RS)-Pindolol

CN 1-[(1-Methylethyl)amino]-3-(4-indolyloxy)-2-propanol

CN 4-(2-Hydroxy-3-isopropylaminopropoxy)indole

CN 4-(3-Isopropylamino-2-hydroxypropoxy)indole

CN Carvisken

CN DL-4-[2-Hydroxy-3-(isopropylamino)propoxy]indole

CN DL-LB 46

CN DL-Pindolol

CN dl-Pindolol

CN LB 46

CN **Pindolol**

CN Prinodolol

CN Visken

FS 3D CONCORD

DR 21870-06-4

MF C14 H20 N2 O2

CI COM

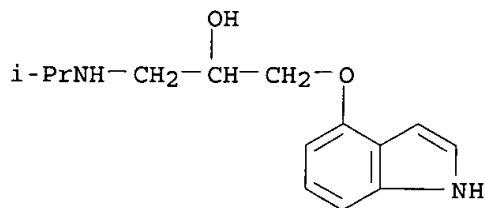
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS,

BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSChem, DDFU, DIOGENES, DRUGPAT, DRUGU,  
EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDb, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
NIOSTIC, PHAR, PROMT, RTECS\*, SPECINFO, TOXCENTER, TOXLIT, USAN,  
USPATFULL, VETU

(\*File contains numerically searchable property data)

Other Sources: EINECS\*\*, WHO

(\*\*Enter CHEMLIST File for up-to-date regulatory information)



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

1660 REFERENCES IN FILE CA (1967 TO DATE)

13 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

1663 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> s racemic pindolol/cn  
L15 0 RACEMIC PINDOLOL/CN

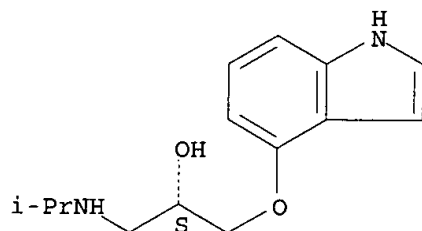
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MISSING OPERATOR 'S(-'

=> s s pindolol  
1243504 S  
32 PINDOLOL  
L16 1 S PINDOLOL  
(S(W) PINDOLOL)

=> d l16

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
RN 26328-11-0 REGISTRY  
CN 2-Propanol, 1-(1H-indol-4-yloxy)-3-[(1-methylethyl)amino]-, (2S)- (9CI)  
(CA INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Propanol, 1-(1H-indol-4-yloxy)-3-[(1-methylethyl)amino]-, (S)-  
CN 2-Propanol, 1-(indol-4-yloxy)-3-(isopropylamino)-, (-)- (8CI)  
OTHER NAMES:  
CN (-)-Pindolol  
CN (S)-(-)-Pindolol  
CN 1-Pindolol  
CN **S-Pindolol**  
FS STEREOSEARCH  
MF C14 H20 N2 O2  
CI COM  
LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA,  
CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CIN, CSCHM, DRUGPAT, IFICDB,  
IFIPAT, IFIUDB, IPA, PROMT, TOXCENTER, TOXLIT, USPATFULL  
(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

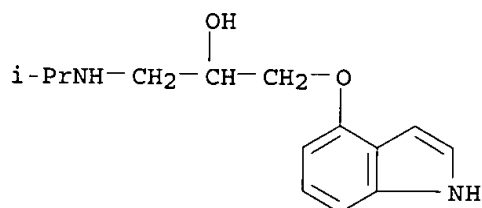
248 REFERENCES IN FILE CA (1967 TO DATE)  
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
249 REFERENCES IN FILE CAPLUS (1967 TO DATE)

=> s rs pindolol  
2969 RS

32 PINDOLOL  
L17 1 RS PINDOLOL  
(RS(W) PINDOLOL)

=> d l17

L17 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2001 ACS  
RN 13523-86-9 REGISTRY  
CN 2-Propanol, 1-(1H-indol-4-yloxy)-3-[(1-methylethyl)amino]- (9CI) (CA  
INDEX NAME)  
OTHER CA INDEX NAMES:  
CN 2-Propanol, 1-(indol-4-yloxy)-3-(isopropylamino)- (8CI)  
OTHER NAMES:  
CN (.+-.)-4-[2-Hydroxy-3-(isopropylamino)propoxy]indole  
CN (.+-.)-LB 46  
CN (.+-.)-Pindolol  
CN **(RS)-Pindolol**  
CN 1-[(1-Methylethyl)amino]-3-(4-indolyloxy)-2-propanol  
CN 4-(2-Hydroxy-3-isopropylaminopropoxy)indole  
CN 4-(3-Isopropylamino-2-hydroxypropoxy)indole  
CN Carvisken  
CN DL-4-[2-Hydroxy-3-(isopropylamino)propoxy]indole  
CN DL-LB 46  
CN DL-Pindolol  
CN dl-Pindolol  
CN LB 46  
CN Pindolol  
CN Prinodolol  
CN Visken  
FS 3D CONCORD  
DR 21870-06-4  
MF C14 H20 N2 O2  
CI COM  
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*, BIOBUSINESS,  
BIOSIS,  
BIOTECHNO, CA, CABA, CANCERLIT, CAPLUS, CASREACT, CBNB, CHEMCATS,  
CHEMINFORMRX, CHEMLIST, CIN, CSChem, DDFU, DIOGENES, DRUGPAT, DRUGU,  
EMBASE, HSDB\*, IFICDB, IFIPAT, IFIUDb, IPA, MEDLINE, MRCK\*, MSDS-OHS,  
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USPATFULL, VETU  
(\*File contains numerically searchable property data)  
Other Sources: EINECS\*\*, WHO  
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1663 REFERENCES IN FILE CAPLUS (1967 TO DATE)

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=> d his

(FILE 'HOME' ENTERED AT 19:05:05 ON 27 DEC 2001)

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
ENTERED AT 19:05:16 ON 27 DEC 2001

L1 159 S 5HT1A ANTAGONIST OR 5HT1A PARTIAL AGONIST  
L2 435 S 5HT1A (S) ANTAGONIST OR 5HT1A (S) PARTIAL AGONIST  
L3 29438 S ?PINDOLOL  
L4 794460 S GASTROINTESTINAL OR GI OR ULCER OR DUODENAL OR DYSPEPSIA OR  
I  
L5 10475 S CHEMOTHERAPY (S) NAUSEA  
L6 803310 S L4 OR L5  
L7 794460 S L6 AND L4  
L8 17 S L7 AND L2  
L9 14 DUP REM L8 (3 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:17:14 ON 27 DEC 2001

FILE 'HOME' ENTERED AT 19:17:55 ON 27 DEC 2001

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
ENTERED AT 19:20:42 ON 27 DEC 2001

L10 100 S RACEMIC PINDOLOL  
L11 255 S RACEMIC (S) PINDOLOL  
L12 2 S L4 AND L11  
L13 2 DUP REM L12 (0 DUPLICATES REMOVED)

FILE 'REGISTRY' ENTERED AT 19:22:58 ON 27 DEC 2001

L14 1 S PINDOLOL/CN  
L15 0 S RACEMIC PINDOLOL/CN  
L16 1 S S PINDOLOL  
L17 1 S RS PINDOLOL

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
ENTERED AT 19:24:23 ON 27 DEC 2001

=> s l14 or l16 or l17  
L18 18365 L14 OR L16 OR L17

=> s l4 and l18  
L19 336 L4 AND L18

=> s l19 and l2  
L20 0 L19 AND L2

=> s l19 and l5  
L21 0 L19 AND L5

=> s gastrointestinal/ti  
L22 87494 GASTROINTESTINAL/TI

=> s l22 and l19  
L23 6 L22 AND L19

=> dup rem  
ENTER L# LIST OR (END):l23  
DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.  
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE  
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L24 4 DUP REM L23 (2 DUPLICATES REMOVED)

=> d l24 1-4 bib, ab, kwic

L24 ANSWER 1 OF 4 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.  
AN 2000178800 EMBASE  
TI Caco-2 cell permeability vs human **gastrointestinal** absorption:  
QSPR analysis.  
AU Ren S.; Lien E.J.  
CS S. Ren, Department Pharmaceutical Sciences, School of Pharmacy,  
University  
of Southern California, 1985 Zonal Ave., Los Angeles, CA 90033, United  
States  
SO Progress in Drug Research, (2000) 54/- (1-23).  
Refs: 35  
ISSN: 0071-786X CODEN: FAZMAE  
CY Switzerland  
DT Journal; Article

FS 030 Pharmacology  
037 Drug Literature Index

LA English

SL English

AB The aim of this study is to elucidate quantitative structure-permeability relationship (QSPR) of various organic molecules through Caco-2 cells, and

to ascertain the relationship between **gastrointestinal** (GI) absorption in humans and Caco-2 cell permeability. Caco-2 cell permeability and human GI absorption data were obtained from the literature. The maximum hydrogen bond-forming capacity corrected for intra-molecular H-bonding (H(b)(c)) and Lien's QSAR model were used in this study. The latest CQSAR software was utilized in calculating the logarithm of partition coefficient in octanol/water (Clog P) and in deriving all regression equations. For 51 compounds, a significant correlation was obtained between Caco-2 cell permeability (log P(caco-2)) and H(b)(C), octanol/PBS (phosphate buffered saline, pH 7.4) distribution coefficient (log D(oct)), log MW and an indicator variable (I) for the charge, with a correlation coefficient of 0.797. When these compounds

were divided into three subgroups, namely neutral, cationic and anionic compounds, much better correlations ( $r = 0.968$ ,  $0.915$  and  $0.931$ , respectively) were obtained using different combinations of various physicochemical parameters. A plot of human GI absorption vs. Caco-2 cell permeability obtained from different laboratories reveals that

Caco-2 cell permeability cannot be used to precisely predict human GI absorption for compounds with P(caco-2) below  $5 \times 10^{-6}$  cm/s, due to interlaboratory and experimental variabilities, and the lack of a simple correlation between human GI absorption and Caco-2 cell permeability. Caco-2 cell permeability may be estimated from the structures of drug molecules using the above-mentioned physicochemical parameters. In general, for compounds with P(caco-2) above  $5 \times 10^{-6}$  cm/s, human GI absorption ranges from 50 to 100%. This is generally acceptable for development into oral dosage form. For the compounds with P(caco-2) below  $5 \times 10^{-6}$  cm/s, careful interpretation of caco-2 cell permeability and use of internal standard for comparison are recommended. Otherwise, good drug candidates may be excluded due to incorrectly predicted poor absorption.

TI Caco-2 cell permeability vs human **gastrointestinal** absorption: QSPR analysis.

AB . . . is to elucidate quantitative structure-permeability relationship (QSPR) of various organic molecules through Caco-2 cells, and to ascertain

the relationship between **gastrointestinal** (GI) absorption in humans and Caco-2 cell permeability. Caco-2 cell permeability and human GI absorption data were obtained from the literature. The maximum hydrogen bond-forming capacity corrected for intra-molecular H-bonding (H(b)(c)) and Lien's QSAR. . . ( $r = 0.968$ ,  $0.915$  and  $0.931$ , respectively) were obtained using different combinations of various physicochemical parameters. A plot of human GI absorption vs. Caco-2 cell permeability obtained from different laboratories reveals that Caco-2 cell permeability cannot be used to precisely predict human GI absorption for compounds with P(caco-2) below  $5 \times 10^{-6}$  cm/s, due to interlaboratory and experimental variabilities, and the lack of a simple correlation between human GI absorption and Caco-2 cell permeability. Caco-2 cell permeability may be estimated from the structures of drug molecules using the above-mentioned physicochemical parameters. In general, for compounds with P(caco-2) above  $5 \times 10^{-6}$  cm/s, human GI absorption ranges



from 50 to 100%. This is generally acceptable for development into oral dosage form. For the compounds with. . .

CT Medical Descriptors:  
 \*cell strain CACO 2  
 cell membrane permeability  
 computer analysis  
 drug absorption  
     **gastrointestinal absorption**  
 hydrogen bond  
 partition coefficient  
 physical chemistry  
 quantitative structure activity relation  
 regression analysis  
 structure activity relation  
 human  
 human cell  
 article  
 priority journal  
 alprenolol: PK, pharmacokinetics  
 alprenolol: PD, pharmacology  
 aminophenazone: PK, pharmacokinetics  
 aminophenazone: PD, . . .

RN. . . 50-23-7; (indometacin) 53-86-1, 74252-25-8, 7681-54-1; (meloxicam)-  
 71125-38-7; (metoprolol) 37350-58-6; (nevirapine) 129618-40-2; (nicotine)  
 54-11-5; (phencyclidine) 77-10-1, 956-90-1; (phenytoin) 57-41-0,  
 630-93-3;  
 (pindolol) 13523-86-9, 21870-06-4; (piroxicam)  
 36322-90-4; (progesterone) 57-83-0; (propranolol) 13013-17-7, 318-98-9,  
 3506-09-0, 4199-09-1, 525-66-6; (salicylic acid) 63-36-5, 69-72-7;  
 (scopolamine) 138-12-5, 51-34-3, 55-16-3; (telmisartan) 144701-48-4; . . .

L24 ANSWER 2 OF 4 MEDLINE  
 AN 97344708 MEDLINE  
 DN 97344708 PubMed ID: 9201075  
 TI Distribution of beta-adrenoceptor subtypes in **gastrointestinal**  
 tract of nondiabetic and diabetic BB rats. A longitudinal study.  
 AU Yu O; Ouyang A  
 CS Division of Gastroenterology, Hospital of the University of Pennsylvania,  
 Philadelphia 19104, USA.  
 NC RO1 DK-34148 (NIDDK)  
 SO DIGESTIVE DISEASES AND SCIENCES, (1997 Jun) 42 (6) 1146-53.  
 Journal code: EAD; 7902782. ISSN: 0163-2116.  
 CY United States  
 DT Journal; Article; (JOURNAL ARTICLE)  
 LA English  
 FS Abridged Index Medicus Journals; Priority Journals  
 EM 199707  
 ED Entered STN: 19970724  
 Last Updated on STN: 19970724  
 Entered Medline: 19970716  
 AB The effects of aging and diabetes on the distribution of  
 beta-adrenoceptor  
 subtypes in the gut were investigated in the BB rat. [125I]Cyanopindolol  
 binding to 10-micron sections was evaluated using film autoradiography.  
 Cyanopindolol binding to beta-, beta 1-, and beta 2-adrenoceptors was  
 displaced by 1 microM propranolol, 50 nM ICI-89-406, and 100 nM  
 ICI-118-551, respectively. beta-Adrenoceptor binding was highest in the  
 circular muscle of proximal colon and lowest in the pylorus of 4- to  
 5-month-old rats. Aging (8- to 10-month-old vs. 4- to 5-month-old rats)

and was associated with increased beta-adrenoceptor binding in the pylorus and reduced binding in the proximal colon. Diabetes had a time-dependent effect on the level of beta-adrenoceptor binding. It was increased in the antral and pyloric stomach but longer periods of diabetes caused a reduction in beta-adrenoceptor binding in the pylorus. Those in the intestine were reduced time-dependently and involved beta 1- or beta 2-adrenoceptors or both.

TI Distribution of beta-adrenoceptor subtypes in **gastrointestinal** tract of nondiabetic and diabetic BB rats. A longitudinal study.

CT . . . U.S. Gov't, P.H.S.

Adrenergic beta-Antagonists: PD, pharmacology

\*Aging: ME, metabolism

\*Diabetes Mellitus, Experimental: ME, metabolism

\*Diabetes Mellitus, Insulin-Dependent: ME, metabolism

\***Gastrointestinal System: ME, metabolism**

Pindolol: AA, analogs & derivatives

Pindolol: PD, pharmacology

Rats

Rats, Inbred BB

Receptors, Adrenergic, beta: DE, drug. . .

RN 13523-86-9 (Pindolol); 81608-27-7 (cyanopindolol)

L24 ANSWER 3 OF 4 CA COPYRIGHT 2001 ACS DUPLICATE 1

AN 125:230385 CA

TI Effect of liquid meal on **gastrointestinal** transit time of the oral dosage form in dogs

AU Nishiyama, T.; Suda, M.; Seki, M.; Sugawara, S.; Miyajima, M.; Kawasaki, C.; Otagiri, M.

CS Central Research Laboratories, Zeria Pharmaceutical Co., Ltd., Saitama, 360-01, Japan

SO Proc. Int. Symp. Controlled Release Bioact. Mater. (1996), 23rd, 581-582  
CODEN: PCRMEY; ISSN: 1022-0178

DT Journal

LA English

AB Continuous and weak contractions obsd. following the intake of a liq. meal

and brought about a delay in gastric emptying time (GET). However, inter-individual variations in GET and gastric motor activities were relatively small after a liq. meal compared with variations under the other 2 conditions. Results suggested that bioavailability studies which utilize intake of liq. meals in dogs will be useful for evaluating the in vivo performance of oral controlled-release dosage forms.

TI Effect of liquid meal on **gastrointestinal** transit time of the oral dosage form in dogs

ST oral controlled release dosage **gastrointestinal** transit

IT Digestive tract

Drug bioavailability

Drug interactions

(liq. meal effect on **gastrointestinal** transit time of oral dosage forms in dog)

IT Pharmaceutical dosage forms

(oral, controlled-release, liq. meal effect on **gastrointestinal** transit time of oral dosage forms in dog)

IT 103-90-2, Acetaminophen 13523-86-9, Pindolol

RL: BPR (Biological process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)

(liq. meal effect on **gastrointestinal** transit time of oral dosage forms in dog)

L24 ANSWER 4 OF 4 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.

AN 89273969 EMBASE

DN 1989273969

TI Drug absorption in **gastrointestinal** disease and surgery.

AU Gubbins P.O.; Bertch K.E.

CS Division of Clinical Practice, College of Pharmacy, University of Kentucky

Medical Center, Lexington, KY, United States

SO Pharmacotherapy, (1989) 9/5 (285-295).

ISSN: 0277-0008 CODEN: PHPYDQ

CY United States

DT Journal

FS 030 Pharmacology

037 Drug Literature Index

LA English

SL English

AB It is well recognized that drug absorption from the **gastrointestinal** tract is influenced by gastric and intestinal motility, surface area available for absorption, and physicochemical properties of the drug. Disease and surgery have been shown to alter these

factors. Consequently, drug absorption can be altered as well, and these affect drug therapy. Apparently this effect is variable, but the variability may be due in part to the complexities of performing studies in this area. For example, many patient factors as well as drug characteristics must be considered. In addition, appropriate interpretation of results requires that intravenous data be collected if changes in absorption are based on bioavailability. At this time, the alterations in drug absorption due to **gastrointestinal** disease and surgery are of unknown or little clinical significance; nevertheless, clinicians should be aware that the possibility of malabsorption exists and anticipate any monitoring of or alterations in therapy that may have to be made.

TI Drug absorption in **gastrointestinal** disease and surgery.

AB It is well recognized that drug absorption from the **gastrointestinal** tract is influenced by gastric and intestinal motility, surface area available for absorption, and physicochemical properties of the drug. Disease. . . be collected if changes in absorption are based on bioavailability. At this time, the alterations in drug absorption due to **gastrointestinal** disease and surgery are of unknown or little clinical significance; nevertheless, clinicians should be aware that the possibility of malabsorption. . .

CT Medical Descriptors:

\*celiac disease

\*crohn disease

\*drug absorption

. \***gastrointestinal surgery**

\*ulcerative colitis

review

human

oral drug administration

priority journal

\*antibiotic agent

\*corticosteroid

\*cyclosporin

\*digoxin

\*indometacin

\*methyldopa

\*metronidazole

\*paracetamol  
 \*pindolol  
 \*propranolol  
 \*salicylic acid  
 \*tetracycline  
 \*warfarin  
 RN (cyclosporin) 79217-60-0; (digoxin) 20830-75-5, 57285-89-9; (indometacin)  
 53-86-1, 74252-25-8, 7681-54-1; (methyldopa) 555-29-3, 555-30-6;  
 (metronidazole) 39322-38-8, 443-48-1; (paracetamol) 103-90-2; (pindolol)  
 13523-86-9, 21870-06-4; (propranolol) 13013-17-7,  
 318-98-9, 3506-09-0, 4199-09-1, 525-66-6; (salicylic acid) 63-36-5,  
 69-72-7; (tetracycline) 23843-90-5, 60-54-8, 64-75-5; (warfarin)  
 129-06-6,  
 2610-86-8, 3324-63-8, 5543-58-8, 81-81-2

=> d his

(FILE 'HOME' ENTERED AT 19:05:05 ON 27 DEC 2001)

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
 ENTERED AT 19:05:16 ON 27 DEC 2001

L1 159 S 5HT1A ANTAGONIST OR 5HT1A PARTIAL AGONIST  
 L2 435 S 5HT1A (S) ANTAGONIST OR 5HT1A (S) PARTIAL AGONIST  
 L3 29438 S ?PINDOLOL  
 L4 794460 S GASTROINTESTINAL OR GI OR ULCER OR DUODENAL OR DYSPEPSIA OR  
 I  
 L5 10475 S CHEMOTHERAPY (S) NAUSEA  
 L6 803310 S L4 OR L5  
 L7 794460 S L6 AND L4  
 L8 17 S L7 AND L2  
 L9 14 DUP REM L8 (3 DUPLICATES REMOVED)

FILE 'STNGUIDE' ENTERED AT 19:17:14 ON 27 DEC 2001

FILE 'HOME' ENTERED AT 19:17:55 ON 27 DEC 2001

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
 ENTERED AT 19:20:42 ON 27 DEC 2001

L10 100 S RACEMIC PINDOLOL  
 L11 255 S RACEMIC (S) PINDOLOL  
 L12 2 S L4 AND L11  
 L13 2 DUP REM L12 (0 DUPLICATES REMOVED)

FILE 'REGISTRY' ENTERED AT 19:22:58 ON 27 DEC 2001

L14 1 S PINDOLOL/CN  
 L15 0 S RACEMIC PINDOLOL/CN  
 L16 1 S S PINDOLOL  
 L17 1 S RS PINDOLOL

FILE 'MEDLINE, BIOSIS, CA, CAPLUS, CAOLD, EMBASE, USPATFULL, PROMT'  
 ENTERED AT 19:24:23 ON 27 DEC 2001

L18 18365 S L14 OR L16 OR L17  
 L19 336 S L4 AND L18  
 L20 0 S L19 AND L2  
 L21 0 S L19 AND L5  
 L22 87494 S GASTROINTESTINAL/TI  
 L23 6 S L22 AND L19  
 L24 4 DUP REM L23 (2 DUPLICATES REMOVED)

